ESSENTIAL DRUGS

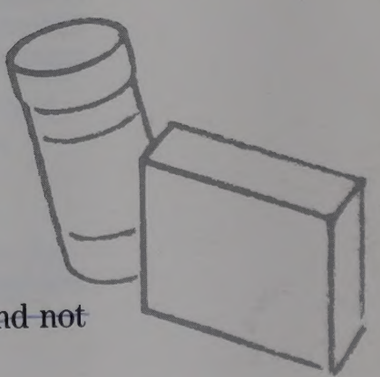
Action for equity

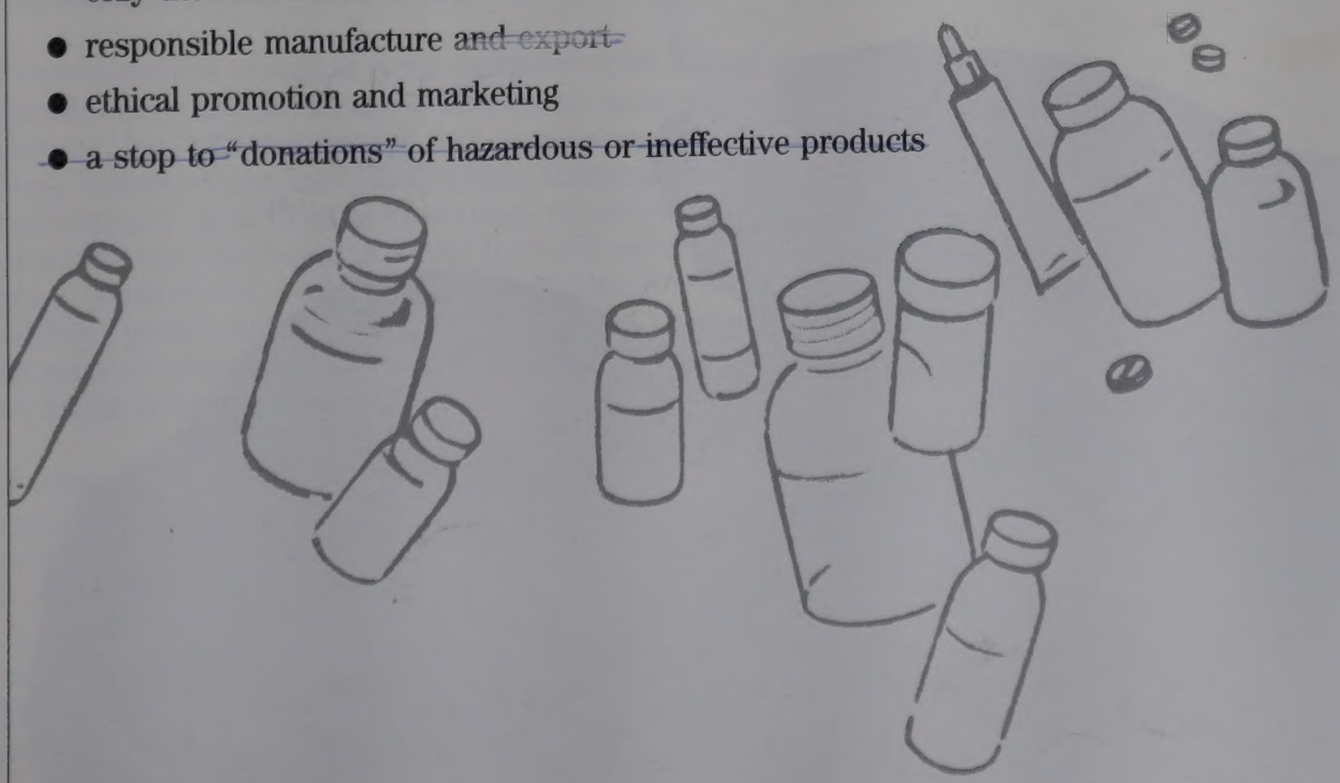
WHO Action Programme on Essential Drugs

What is equity in essential drugs? The Action Programme's "charter" explains:

A CHARTER FOR EQUITY IN ESSENTIAL DRUGS

- access for all people to necessary medicines
- prices which society and the individual can afford
- priority for drugs which meet the real health needs of the majority of the population
- fair distribution between cities and rural areas
- assurance that drugs are safe, effective and of good quality
- adequate training of all prescribers
- access to objective information
- real dialogue between patient and prescriber
- empowerment of consumers through education and information
- community involvement and participation
- development of drugs that meet health needs in the third world and not only those of rich countries
- responsible manufacture and export
- ethical promotion and marketing
- a stop to "donations" of hazardous or ineffective products





The purpose of this brochure is to explain the activities of the World Health Organization's Action Programme on Essential Drugs.

While drugs alone are not sufficient to provide adequate health care, they do play an important role in protecting, maintaining and restoring health. This century has witnessed an explosion of pharmaceutical discovery which has dramatically widened the therapeutic potential of medical practice. Yet, the vast increase in the number of pharmaceutical products marketed in recent years has not made these drugs available to all people and has not been matched by a proportionate improvement in health.

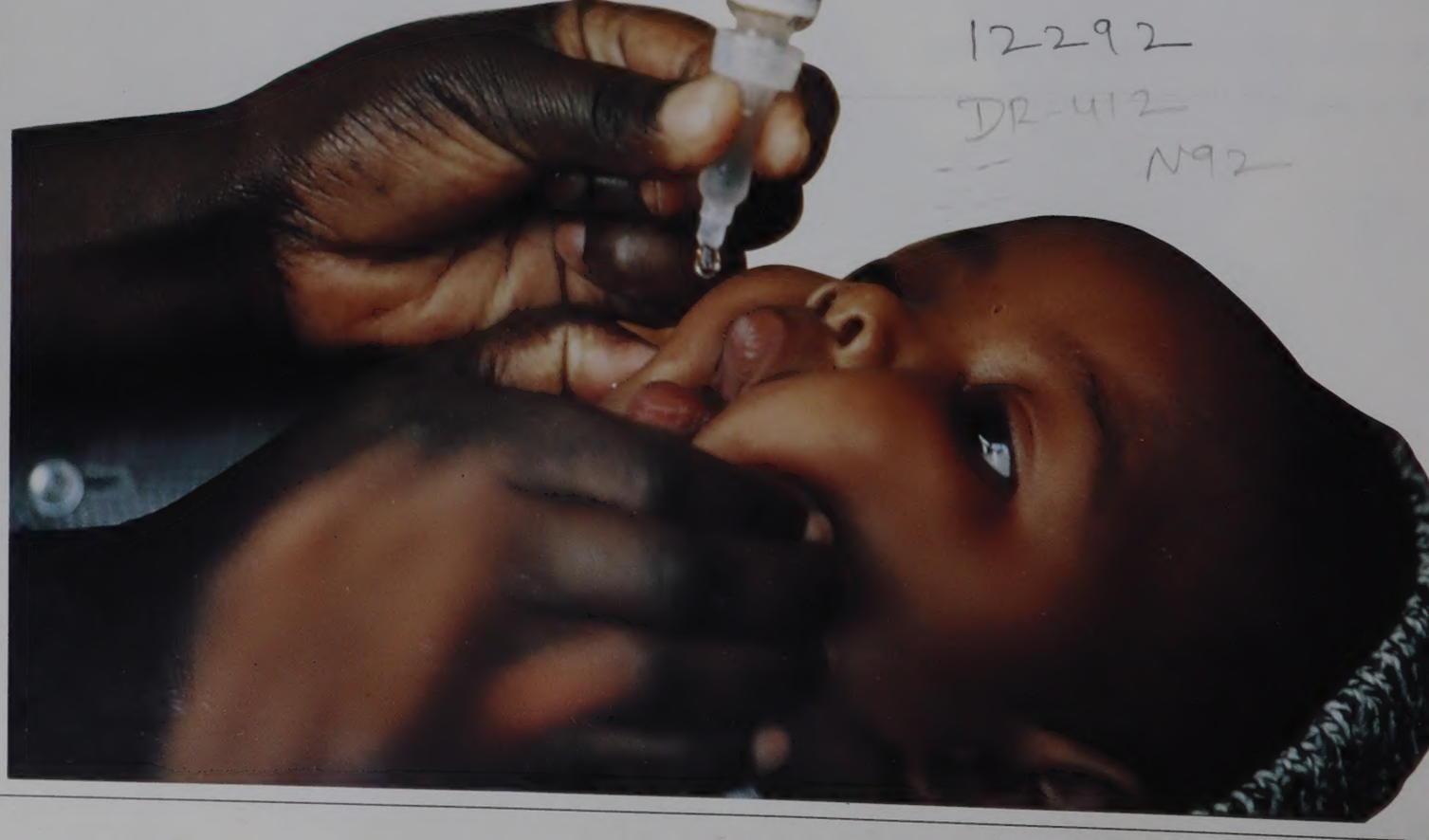
In recent decades governments in developing countries have faced great difficulty in procuring drugs and vaccines at reasonable prices. Even when they could afford modern products, their regulatory control, equitable distribution and rationa use by both prescribers and the public ha posed large problems. Not all drugs that were purchased represented value for money and met health priorities. Nor was at all sure that they reached the places where they were most urgently needed.

It was in a bid to assist countries in this difficult situation and to improve equity o access to vital medicines, that WHO bega in the late 1970s to expand its activities i the pharmaceutical area and to focus on essential drugs, moving from concept to model and from model to policy.

In 1981 the Action Programme on Essenti Drugs was established to provide operational support to countries in the development of national drug policies ba on essential drugs and to work towards t rational use of drugs.

The Action Programme seeks to ensure t all people, wherever they may be, are ab to obtain the drugs they need at a price t they and their country can afford; that th drugs are safe, effective and of good qual and that they are prescribed and used rationally.

Polio immunization in Kenya.



INTRODUCTION

"Essential drugs are those that satisfy the health care needs of the majority of the population; they should therefore be available at all times in adequate amounts and in the appropriate dosage forms." The use of essential drugs, WHO, 1990

Governments recognise health care as a basic right of their people. In recent years the World Health Organization's goal of health for all has been approached in many countries through primary health care – an expanded network of front line services delivered at local health centres staffed by health workers.

Providing these outlying dispensaries with regular supplies of drugs to treat the most common conditions, which their health workers are trained to use – and providing them at low cost – is essential to making primary health care work. When drugs become available in village health centres the local community gains confidence in the health service and this also facilitates health promotion and disease prevention strategies. If medicines are not available people lose confidence in the whole system. They will go elsewhere to buy whatever commercial remedies they can; these may be sub-standard and be supplied from sources that are usually unqualified to diagnose or prescribe.

Many developing countries found that it is not a simple matter to ensure the availability of safe, affordably priced essential drugs throughout the country. Adequate and enforceable legislation is needed, together with technical, medical and logistic skills that are in short supply in many countries.

Pharmaceutical products were marketed with little concern for the different health needs and priorities of individual countries – yet promotion created demand by both prescribers and consumers. City pharmacies might stock a large variety of the latest antibiotics; tranquillizers and tonics would figure prominently, as well as a wide range of anti-diarrhoeal drugs. Some of these products are effective, but many have no proven therapeutic value. And in some parts of the world drugs that are dangerous – particularly when used without proper medical supervision – were (and are) sold over the counter. In stark contrast, a great many people living in the countryside had no access to drugs of any kind.

It was apparent that if medicines that meet the real health needs were to be equally available to all, absolute priority had to be given to the selection, procurement, distribution and proper use of such essential drugs.

A few countries tried to improve their methods of drug procurement and to rationalize drug availability but in the absence of a well planned strategy, firm political commitment and international support, most of their efforts ended in failure.

THE ESSENTIAL DRUGS CONCEPT

"Corresponding to national needs"

A report to the 1975 World Health Assembly referred to the experience of a few countries which had adopted schemes of basic or essential drugs. Such schemes were intended to help people whose basic health needs could not be met through the existing supply system by giving them access to **the most necessary drugs.**

The Assembly, after examining the main drug problems facing the developing countries, called on WHO to help member states to draw up national drug policies and to advise *"on the selection and procurement, at reasonable cost, of essential drugs of established quality corresponding to their national health needs."*

As WHO said at that time: *"There is an urgent need to ensure that the most essential drugs are available at a reasonable price, and to stimulate research and development to produce new drugs adapted to the real health requirements of developing countries. This calls for the development of national drug policies for the whole drug sector, linking drug requirements with health priorities in national health plans formulated within the context of social and economic development."*

In 1977 a WHO committee of experts met determine how many drugs were really needed to ensure a reasonable level of health care for as many people as possib The committee's first Model List of Essen Drugs appeared in 1977, and contained some 200 items. All of the drugs and vaccines on the list were of proven safety and efficacy, and possessed well understood therapeutic qualities. Most we no longer protected by patent and could produced in quantity at reasonable cost. The Model List is revised every two year and so can rapidly respond to evolving needs and pharmaceutical advances.

The expert committee clarified the functi of the Model List when it stated: "Becaus of the great differences between countrie the preparation of a drug list of uniform, general applicability is not feasible or possible. Therefore, each country has the direct responsibility of evaluating and adopting a list of essential drugs, accordi to its own policy in the field of health. Th list of essential drugs based on the guidelines put forward in (each) report i model which can furnish a basis for countries to identify their own priorities to make their own selection."

When drugs are available in the health centre both the community and the health workers gain confidence.

Photo: WHO

The economic crisis of the 1980s provided a final push to the concept of essential drugs. The global, social and political environment, including the emergence of an international consumers' movement, created favourable conditions for acceptance of the concept.

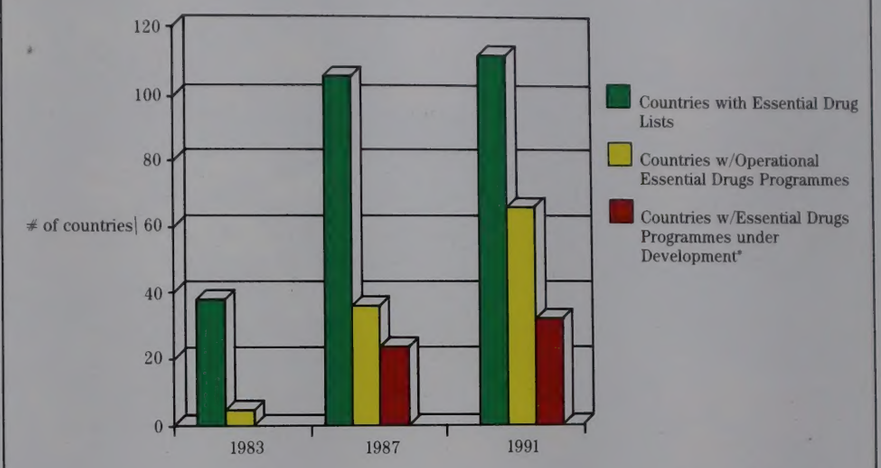
A revolution in public health

The Model List sparked off a revolution in international public health. It was at first met in some quarters with surprise, and opposition; in others with enthusiasm. Some physicians, accustomed to choosing from thousands of brands of drugs, saw an essential drugs list and policy as a threat to their freedom to prescribe. The large pharmaceutical companies feared that limited national lists of drugs and price competition from manufacturers of drugs without a brand-name would not only reduce their profits but would also make it difficult, if not impossible, for the industry to continue its investment in research and the development of new pharmaceutical products.

But it is now clear that if real health needs are to be met and if there is to be equal access to appropriate health care, countries cannot afford to waste scarce resources on drugs which either do not meet these majority needs or which are priced at a level which society cannot afford. Nor is "freedom to prescribe" a true freedom when it is not possible for the prescriber to individually evaluate the thousands of drug products being promoted – which no single prescriber can do objectively – or if it jeopardizes access to the health care needs of the majority.

Developing a national essential drugs list, however, is only one of the desirable building-blocks – although perhaps the keystone – in a national drug policy. Such a national policy in turn should be an integral part of a country's health policy. As such, it calls for a high degree of political will to put into practice. Lack of political will, as much as lack of resources, has in the past been a factor in the failure of some countries to ensure a sufficent supply of drugs and vaccines.

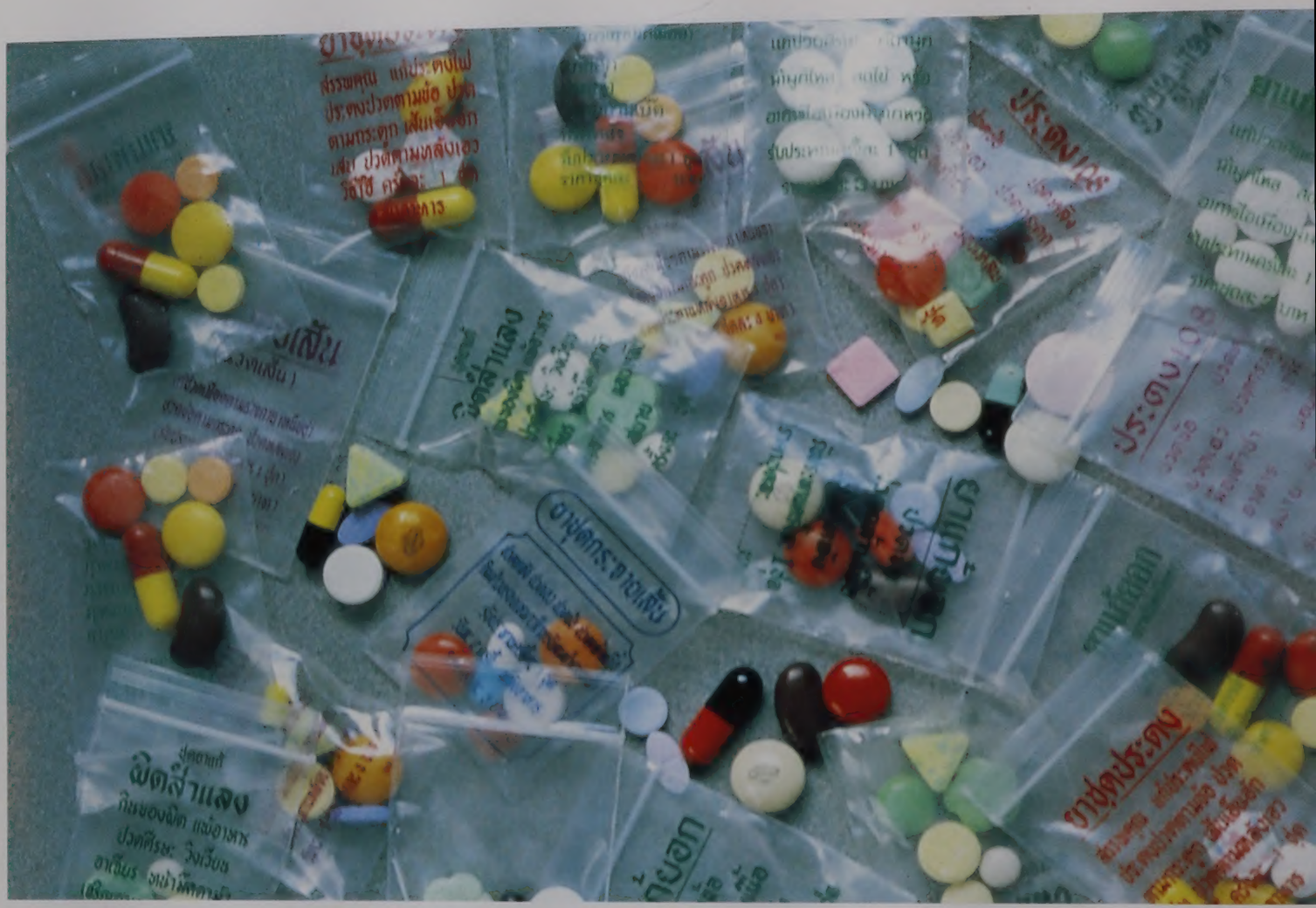
Adoption and Implementation of the Essential Drugs Concept



It was largely with this in mind that the essential drugs concept was built into the Declaration of Alma-Ata in 1978, which identified access to essential drugs as a basic element in primary health care. The provision of essential drugs is therefore a core component of the strategy – agreed by WHO and all its member countries – for bringing about health for all.

And it was in order to assist countries in drawing up and implementing national drug policies based on the concept of essential drugs that, in 1981, WHO launched its **Action Programme on Essential Drugs.**

HOW MANY DRUGS DO WE REALLY NEED?

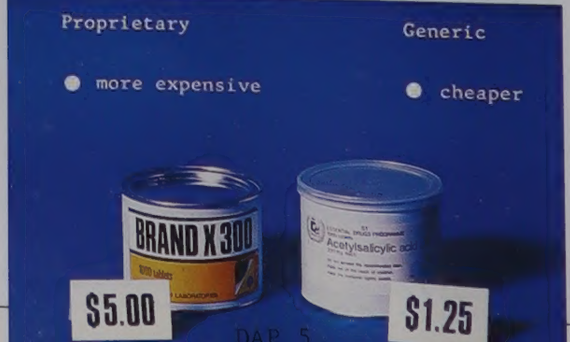


6

Irrational combinations of drugs, sold as a set to be taken together.

There can never be a short and simple answer to the question of how many drugs are really essential. Each country's needs are different, and where one country might want a wide range of antimalarials, another might feel a great need for cardiovascular or other drugs.

WHO's Model List of Essential Drugs has stood the test of time. It has been regularly revised since 1977 but the changes have been minor. The number of drugs on the list now stands at about 270. Some drugs have been deleted when they were overtaken by "better" substances. Others were added because they improved the list without simply duplicating drugs already on it, because they were new preparations w met the strict criteria of being "essentia



Countries have also limited the number drugs available. Norway, for instance, h only about 800 active substances on th market, and new drugs may not be introduced unless they are judged to be necessary and better than existing rem Nigeria has developed an essential drug of some 400 products which is mandat for both the public and the private sect Only products which are on the list ca imported or marketed in the country.

Hospitals in both the industrialized and developing countries frequently make u their own limited drugs list. A general hospital list might contain anything fro 300 to 700 different drugs.

Many drugs on the market contain multiple ingredients. This often makes it difficult to deliver accurate quantities of the required active substance and it also increases the cost. In some cases the active substances in the product conteract each other's physiological effect. Cough preparations are a frequent example of this; they may contain one substance to reduce cough spasm – useful in a dry tickling cough – and another substance to induce spasm and bring up mucous – which is useful in a productive cough. It is obviously absurd to have both substances in the same product. WHO recommends that in general drugs should contain only a single ingredient. Combination drugs should be used only when they offer a clear therapeutic advantage or when – as in the case of leprosy or tuberculosis – they make it easier for the patient to follow the treatment.

WHO recommends the use of the international non-proprietary name (INN) for each drug. This is the shortened scientific name based on the active ingredient used, commonly known as the generic name. The use of generic names has many advantages. A simple name linked to the active ingredient is easily recognisable. It also makes for greater safety in prescribing, dispensing and administering.

Most of the essential drugs are no longer under patent and can be manufactured freely under their generic names. Furthermore, such drugs can usually be bought at a much lower price.

All the evidence suggests that limiting the list of drugs brings more advantages than disadvantages to public health. It is more economical; there is less risk of duplication, confusion and mistakes; ordering, storing and distributing the drugs is made easier; prescribers, dispensers and patients can all remember more easily the therapeutic effects and the adverse reactions.

Nobody could reasonably claim that "the more drugs, the better." National lists containing thousands of drugs have no advantage over more limited lists.

Today more than 113 countries have adapted the Model List to match their own patterns of disease and financial resources.

Before the start of the Nile Province Essential Drugs Programme this Sudanese health worker had few, if any, drugs to dispense. Now supplies are more regular and patients have greater confidence.

Photo: WHO/J. Hasfeldt

THE WORK OF THE ACTION PROGRAMME

The WHO Action Programme on Essential Drugs performs two critical functions. The first is to provide conceptual leadership and advocacy in mobilizing and coordinating a global collaborative effort to improve the world drug situation. The second is to cooperate with Member States and international, bilateral and non-governmental organizations in the formulation and implementation of national drug policies and essential drugs programmes.

To strengthen its country support work the Programme conducts operational research to examine national and global constraints to pharmaceutical supply and use. It also develops tools to facilitate the implementation of national programmes, such as improved methodologies to estimate drug needs, and model curricula for the training of health professionals, to mention just two.

A sure supply of essential drugs is vital if health services are to meet the needs of the community.

Starting an essential drugs programme

About 70% of the Programme's budget and 60% of its activities are focused on support to country programmes. If a country is at the initial stage of considering the development of an essential drugs programme the most common approach used is to carry out a situation analysis, prepared jointly by nationals and WHO. This includes a general assessment of the health service structure including the health information system. It examines in detail the pharmaceutical supply system, covering drug importation, production, distribution, prescribing, dispensing, financing, legislation, registration, quality assurance, drug information and education for health professionals and the general public, and training of health workers.

Following this assessment a national seminar is organized to which all interested parties are invited. The goal of the seminar is to select priorities, identify constraints, and obtain broad consensus and the commitment of everyone who will be involved in or affected by the implementation of the policy.

A country action plan is then prepared with the help of WHO, which can also serve, if necessary, as a project document for fund raising.

The Action Programme's work is based o four important principles:

- to respond to the needs of Member States;
- to strengthen national capacity through improved infrastructure and training;
- to promote decentralized decision-mak and operational responsibility;
- to integrate essential drugs programme into the overall health care system.

The approach is flexible and pragmatic; t seek to solve the major problems in orde of priority. The aim is always to strength national drug policies, as an integral part the national health policy.

A comprehensive national drug policy w typically include legislation governing all aspects of drug supply, promotion and u the development of a national system fo selecting, procuring, storing and distribut essential drugs, the provision of drug information to both prescribers and the public, and training and monitoring to ensure that drugs are used properly.

How policy is made and some of the problems faced, together with country examples, are examined in the following pages.

Why countries need a national drug policy

Many countries lack adequate supplies of drugs appropriate for their health needs, while the irrational use of drugs poses problems in both developed and developing areas of the world. The reasons for this are complex and are not only the result of financial and budgetary constraints, lack of infrastructure and human resources. They also reflect the attitudes and behaviour of the government, prescribers, dispensers, consumers and the pharmaceutical industry.

WHO advocates that every country should have a national drug policy. This provides the framework and tools for an adequate supply of safe and effective drugs of established quality, at an affordable price, which are properly prescribed and used.

The ministry of health is the natural leader in developing such a policy. But other government departments which have roles to play in the procurement, processing, distribution and rational use of drugs – among them those responsible for planning, finance, education, industry and commerce – will need to participate in this work.

A policy is a guide to action and a commitment to a goal. A primary goal will be to make essential drugs available to the entire population, and to assure the safety, efficacy and quality of medicines. Other health related goals include improving prescribing and dispensing practice, and promoting the correct use of medicines by the public.

A national drug policy also has economic goals, whose principal focus will be to lower the cost of drugs to government and the community, and to reduce the foreign exchange drain from drug imports through wiser purchasing. The policy will need to consider the inter-relationship between the public and the private sectors since drugs may be prescribed in the public sector but purchased in the private sector. It will also need to consider the fact that self-medication accounts for a high proportion of the drugs consumed in many countries. And finally, the policy will include national development goals, such as an improved infrastructure, increasing human resource skills in management, pharmacy and medicine, or promoting the local production of drugs.

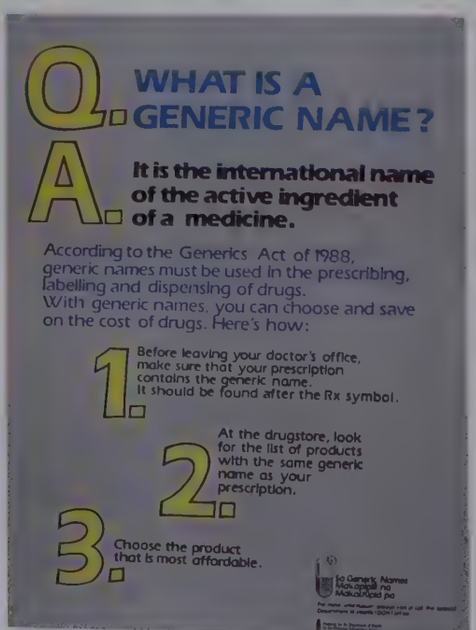
Philippines

In 1986 the Philippines, concerned by the poor availability of essential drugs, the presence on the market of products which had been banned or restricted in other countries, and the increasingly irrational use of pharmaceutical products, decided to draw up a national drug policy. After a detailed situation analysis, conferences and workshops on the principal issues and problems were held with representatives of all affected and interested groups. A 1987 seminar on policy options was followed by the public announcement of the key elements of the new national drug policy, which were also promoted through a major mass media campaign. The policy was given legislative backing through the Generics Act of 1988.

The Philippines national drug policy has four main pillars:

- **quality assurance** – ensuring that only safe and effective drugs are allowed on the market.
- **rational use** – encouraged by a national formulary (containing 297 active ingredients plus a complementary list of another 263), which is mandatory in the public sector; guidelines for advertising and promotion; prescriber and public education; the introduction of generic labelling, and the de-listing of unsafe and ineffective products.
- **self-reliance** – through strengthening the country's capabilities for manufacturing essential drug products.
- **targeted procurement** – including purchase under generic names.

The Action Programme is collaborating with the Philippine Government in many aspects of its national drug policy, including drug registration and impact monitoring.



Philippine Government posters explaining national drug policy.

Selection of essential drugs

A national list of essential drugs will b selected on pharmacological, therapeu and economic grounds. The number of drugs to be supplied at each level of the health system is determined by the ability of the health workers at that level to diagn and treat the diseases prevalent locally.

In country after country a surprisingly uniform picture of drug selection has emerged. At the village health post or dispensary level, 10 to 15 drugs will meet immediate needs. At the health centre lev where the diagnostic and clinical facilities are better and the staff more highly traine about 30 to 40 drugs will suffice for 80 t 90% of all complaints. District and provin hospitals may need around 100 to 120 drugs, and the larger referral and teachin hospitals the full range of 200 to 400.

A far more complex task than selecting t drugs, however, is deciding on the quantities needed. Very often the records past consumption only reflect availability and other factors, such as irrational prescribing, and confuse the picture. So a assessment has to be made of the presen and anticipated pattern of sickness in eac locality, the attendance rates at health centres and clinics, and the diagnostic an prescribing competence of the staff. The Action Programme has produced a pract manual "Estimating Drug Requirements" help countries in this process.

Legislation

A national drug policy must be backed b appropriate legislation and regulatory control. There need to be laws to clarify what is permissible and what is not in th field of pharmaceuticals, as well as to lay down who may manufacture or import drugs, and who may prescribe them. If drugs can only be imported by a person who has a licence, for example, there ha be a regulatory authority to grant or refu such licences. Besides ensuring that available drugs are of acceptable quality safety and efficacy, legislation must regu their storage, availability and distributio

Legislation is also needed to lay down t regulations and professional codes that relate to the prescribing and dispensing

Photos: WHO/J. Schytte

drugs. The development of primary health care in many countries calls for special attention to be given to the role of village health workers and nurses in prescribing and dispensing. Very often the gap between human resource needs and availability makes it necessary to allow for some degree of flexibility in legislation and codes, without compromising either the quality of health care or the objective of the safe and rational use of drugs. So laws must stipulate what drugs may be prescribed at different levels of the health care system, according to the availability and competence of health personnel. Many member states draw on the Action Programme's wide experience and advice when developing such pharmaceutical legislation.

Drug financing

Throughout the 1980s the developing countries have faced the most serious economic difficulties they have ever known. Economic recession has created a crisis in the financing of drug supplies. Some countries can no longer pay their pharmaceutical bills, seriously jeopardizing the goal of universal access to essential drugs. This situation, far from raising doubts about essential drug policies has done the opposite, as the problem of how to make optimal use of insufficient resources has always been fundamental to such policies. The essential drugs concept provides criteria to be used in making choices when pursuing the dual objectives of rational management of resources and promotion of public health.

In response to this crisis many drug financing initiatives, often centering around community financing or cost sharing, are being tried in various countries. But in some cases such systems are promoted without proper trial or evaluation. The Action Programme advocates that any financing system needs very careful piloting and monitoring to ensure that it is not the already socially disadvantaged and those who are ill who bear the brunt of the new scheme, or who are denied access to health care because they cannot afford the payment. The responsibility for resolving the economic problem represented by

Street vendors in Nepal. When drugs are not available in the health centres people will buy what they can, often from unauthorised or dangerous sources of supply.

Nigeria

Nigeria's essential drugs list was promulgated in a December 1989 Federal Decree and contains a total of 409 drug items. With effect from 1 January 1991, only these drugs could be used in both the public and private sectors. All other drugs were to be withdrawn from the market before that date, and all advertising and promotion of other drugs was banned. Labels must now carry the generic name in as large a size as the brand name, and prescribing by the generic name only is encouraged.

Under the National Drug Policy for Nigeria published in 1991, proposed legislation includes an essential drugs policy, controlling the drug supply (imports, exports, manufacture, storage, distribution and sale), prescribing and dispensing, registration of drugs, and regulation of labelling, information and advertising.

financing difficulties should not fall first upon consumers, particularly the disadvantaged, whose numbers are growing in this crisis situation.

An Action Programme workshop on drug financing concluded: first, that considerable savings are to be found within the drug supply system and through reallocation of health sector expenditures. Virtually every country can do much to improve the efficiency with which it uses available funds; second, experience with user fees shows that, although such fees are useful as a rationing mechanism, in many low-income countries they do not contribute greatly to revenue; third, that cost recovery often brings with it hidden costs, both in terms of decreased use of health facilities – particularly by vulnerable groups most in need of care yet least able to pay – and the administrative costs of actually collecting and administering the funds.

Drug financing

Action Programme operational work in this field is based on the following principles:

- that the objective of the various systems of financing drugs must be to improve and facilitate the access of the entire population to drugs of established quality. Financial equilibrium is no more than a tool for guaranteeing access to drugs;
- that the responsibility and commitment of the state to participate in paying the drug bill is fundamental;
- that drugs are never free – their cost has always to be covered by someone. Any system of users' contribution to the cost, even if only token, must be carefully researched with full regard for issues of equity;
- that the introduction of various methods of direct monetary contribution from the users to pay for drugs must be preceded by cost analysis and rationalization of financial management;
- that economies made through the selection of drugs and their rational use must be one of the main sources of additional resources for the purchase of drugs;
- that the choice of drug purchasing systems has a significant influence on the price and therefore on the population's access to drugs;
- that the percentage of the state budget devoted to health, and hence to drugs, needs to be significantly increased in the great majority of developing countries as a matter of priority.

Drug procurement

Using International Nonproprietary Names (INN) is essential to standardize mechanisms for procurement, store management and exchange of drug information. Procuring by INN is a possibl means to avoid unnecessary purchases of more expensive brand-name drugs, when backed up by reliable systems of quality assurance. The Action Programme assists Member States to share experience and expertise in procurement and distribution and has helped to develop manuals and guidelines for good procurement practices

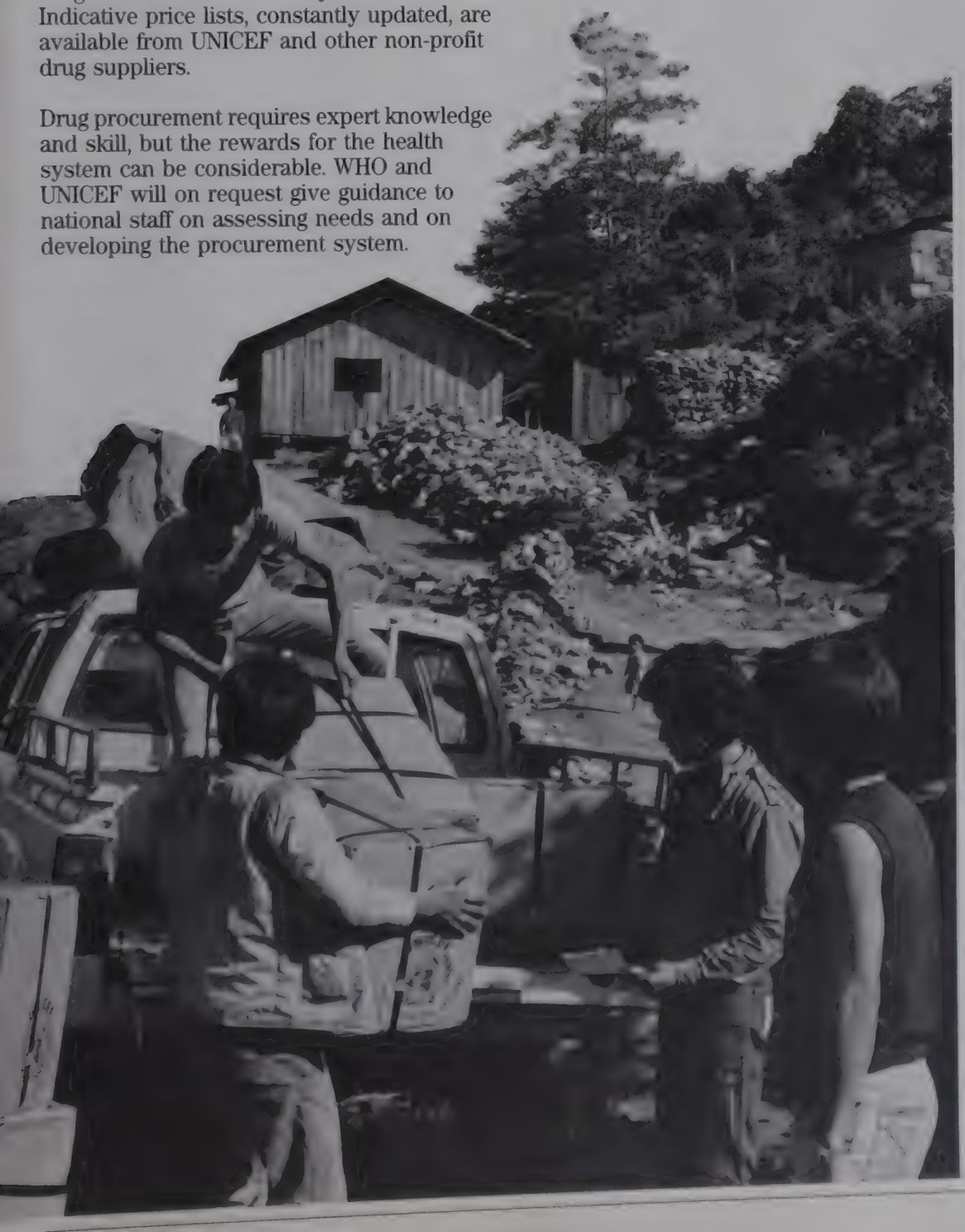
Many countries still do not have efficient centralized procurement systems. When different sectors and levels of government make separate purchases they lose out or bulk purchase discounts. To make matters worse, purchases are often made at excessively high cost due to a lack of information about going prices on the international market. Developed and developing countries need to work togeth to improve information exchange. Where possible, developing countries should poo requirements to take advantage of economies of scale. Better systems of

procurement, access to market information and bulk orders can achieve considerable savings, which can then be spent on further improving drug availability.

The best way at the moment to obtain drugs of good quality at low prices appears to be through international competitive tender for bulk drugs in standard packages. Since UNICEF, in collaboration with WHO and several countries, began using the tender system in the eighties the cost of essential drugs has been considerably reduced. Indicative price lists, constantly updated, are available from UNICEF and other non-profit drug suppliers.

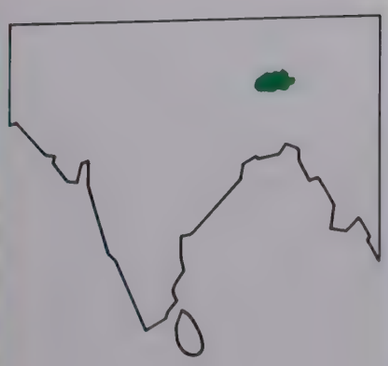
Drug procurement requires expert knowledge and skill, but the rewards for the health system can be considerable. WHO and UNICEF will on request give guidance to national staff on assessing needs and on developing the procurement system.

Once the procurement of drugs of the right kind and in the correct quantities is underway, an efficient national distribution system is needed to move the selected drugs from the central medical stores to hospitals, clinics, pharmacies and right out to the most remote health centre or health post.



Off loading supplies of essential drugs in Bhutan. Many health centres will be two days' travel from the road so the drugs will be carried by porters or ponies in the last stage of their journey.

Photo: WHO E. Lauridsen



A Himalayan challenge: one country's experience with an essential drugs programme

"Before the Essential Drugs Programme we used to receive so many complaints from patients" says a pharmacy technician from Thimphu Hospital. "We had very few drugs... sometimes there were only six drugs available in the dispensary and we had to turn away many patients empty handed".

Can a small Himalayan country with extremely rugged terrain, scattered population and limited financial resources ensure that low-cost, quality essential drugs are constantly available at all of its health facilities? "Yes – with careful management", says the Department of Health Services of Bhutan. "But there has to be a commitment to such a goal and there are many difficult problems to be solved along the way".

The year 1986 was a turning point for the drug supply system in Bhutan. In that year the government defined and committed itself to a drug policy which was subsequently implemented by its WHO supported Essential Drugs Programme. Four years later, it was found that at least 80% of all essential drugs were constantly available at health facilities, procurement prices were lower than those paid in 1985 and 95% of tested products were of acceptable quality.

The drug supply system: its problems and some solutions

One of the first steps to improve the supply system was to develop lists of essential drugs for each type of health facility. A newly established National Drugs Committee selected drugs under generic name on the basis of disease data, safety, effectiveness and cost.

Calculating how much to buy was a difficult job at first. If you don't have accurate records of how many paracetamol tablets have been used in the last year, how can you estimate how many will be needed next year? Good storekeeping is obviously very important.

"Storekeeping used to be such a headache" says a district storekeeper. "We didn't have good records so we used to guess at how much to order. Then drugs would either go out of stock quickly or simply expire... there was no system of using generic names and we used to store three brands of Ampicillin in three different places. That became very confusing and it used to be difficult to know how much we had in stock and how much to order. In Tashigang Hospital there was no room to unpack newly received drugs because the store was packed full of drugs which had expired over the previous ten years."

The Health Department has revised storekeeping procedures. Training materials have been prepared and all storekeepers trained in the use of the new system. Drugs are stored in alphabetical order according to generic name. Accurate, up to date stock ledgers are the key to everything. Stock ledger accuracy is independently checked on a routine basis. Every six months all health facilities use their ledgers to complete a report of monthly drug consumption and these reports are used by the Health Department to calculate how much to purchase and how much to distribute.

The approach to obtaining cheap, reliably supplied, quality drugs is straightforward: gather information about Indian manufacturers and obtain WHO Certificates for Pharmaceuticals moving in International Commerce. Use a restricted tender from reputable manufacturers and compare with UNICEF prices. Closely monitor delivery and quality performance of the suppliers and only select future suppliers when their past delivery and quality performance has been good. Test drugs routinely (the WHO Collaborating Centres in Bangkok and Calcutta have been used so far) and ensure that the manufacturer and relevant drug regulatory authority are clearly informed about any quality control failures.

The distribution system poses unique problems in Bhutan. Most of the basic health units and dispensaries are at least two days walk from the nearest road. There are only a few months in each year when roads are not blocked by landslides or snow. This means that for most health facilities, drugs can be distributed only once per year and porters and ponies have to be arranged to transport the drugs from the road to the health facility. There is consequently a very small margin for error: if the drugs are distributed late because they have been received late from the suppliers they may reach remote units only six months later. If drugs are received in the country with less than 18 months shelf life, they may well expire before they are used. Fine tuning the drug delivery service is therefore of critical importance, and is being achieved by good procurement and by improving the management system.

Targeting rational use

But if drug availability is crucial, it is also essential to check that the drugs are being prescribed rationally. A standard treatment guide (diagnostic guidelines and drug information for basic health units) has been prepared, distributed and used to train all health workers, and doctors receive drug information. Plans for the future development of the programme also include public education in the proper use of medicines. Promoting rational drug use is an ongoing task and one of the most difficult.

Although Bhutan does not yet have its own professional pharmacists, five nationals are now studying pharmacy abroad under WHO fellowship. The skills they acquire will provide Bhutan with the national expertise needed to continue and strengthen its essential drugs programme well into the future.

Quality assurance

Pharmaceutical products should not be admitted to a country if they are not of the right quality. That quality must be guaranteed throughout the distribution chain, in all climates and by all methods of transport. This calls for adequate regulation, an inspection system and for quality control that will ideally be based on a small national laboratory, or perhaps a larger regional one, capable of analysing and of carrying out regular checks of all drugs used within the country.

In settings where regulation and enforcement are weak, this can lead to the presence on the market of fake and sub-standard drugs. In addition, drugs that are unsafe and ineffective are often sold and go unchecked due to lack of an adequate system to monitor and ensure quality. WHO has produced guidelines for establishing small national drug regulatory authorities and the Action Programme assists member states in translating these principles into a pragmatic locally appropriate scheme.

Drug registration is mandatory if a quality assurance system is to function effectively. As part of its assistance to governments to improve their national systems of registration the Action Programme has collaborated in the development of simple computerized drug registration systems. Prototype versions are currently being used in some 15 developing countries.

Photo: WHO/D. Schwaper

The quality of essential drugs is carefully checked at this Lesotho laboratory.

WHO's Certification Scheme on the Quality of Pharmaceutical Products moving in International Commerce also has an important role to play in ensuring that drugs are of good quality. The Scheme, to which 112 countries are signatories, enables importers to find out whether the supplier meets WHO requirements for good manufacturing practices in regularly inspected factories, and whether the drug is registered in the exporting country. The Action Programme is working to strengthen the abilities of national authorities to transmit, receive, and digest the information which the Scheme provides.

WHO's recommendations to manufacturers are spelled out in the code of good practices in the manufacture and quality control of

Networks of quality control laboratories

International networks for quality assurance can play a valuable role in maximising the use of national resources such as quality control laboratories, harmonizing drug regulatory requirements, and impeding international commerce in substandard products.

The Americas have been a pioneer in such regional collaboration. A network of Latin American countries exchanges pharmaceuticals for quality control testing using laboratories in most of the Latin American countries. Also, the Caribbean Drug Testing Laboratory in Kingston, Jamaica, tests samples for CARICOM member countries, and in particular those participating in the Eastern Caribbean Drug Service.

Africa is also taking a similar path. With the guidance of the WHO Regional Office for Africa, four regional quality control laboratories have been established – in Ghana and Zimbabwe for English-speaking neighbouring countries, and in Cameroon and Niger for the French-speaking neighbouring countries.

Secure, weatherproof buildings, like this new pharmacy at Machinga District Hospital, constructed under the Malawi Essential Drugs Programme, keep medicines safe and in good condition.

goods (GMPs). In countries where facilities no longer meet GMP standards because of outdated technologies and lack of national technological capacity to sustain improvements, governments must choose whether to improve manufacturing conditions or shut down facilities. The Action Programme assists by providing advice on the technological difficulties and economic costs of improving conditions, together with the health risks of not doing so. As an important related issue, the Programme supports regional efforts to harmonize trade policies to foster trade in locally manufactured products. This, in turn, provides greater economic incentives to improve manufacturing conditions.

The International Federation of Pharmaceutical Manufacturers' Associations has urged its members to provide training in quality control for nationals of developing countries and a number of these training courses take place each year.

Storage and distribution

In many countries logistic problems hinder the delivery of safe and effective drugs to people at the periphery of the health care system. In most developing countries a central medical store is the heart of the distribution system. This is often an old, dilapidated building that is unsuitable for the proper storage of modern drugs. The procedures for ordering, storing and distributing drugs may also be cumberson and rigid, so that there are frequent delay in meeting requirements or shortages, wh expired drugs take up valuable space.

Storage problems may be overshadowed distribution problems. Many countries lac the management base necessary for a safe rapid and economical distribution system Vaccines especially pose a formidable challenge, since they need to be protected from heat all the way from manufacture t use. No drug policy or legislation can be considered complete unless it pays prope attention to the modern management of ordering, storing and distributing drugs.

The Action Programme provides guidanc on the technical aspects of refurbishing o constructing new central medical stores. advises countries on how to establish networks of regional supply points to facilitate distribution, and ways of strengthening the managerial framework staff skills to improve national systems. I some cases the Programme helps to obta donor funding for such work. The development of training materials, manua and guidelines is also an important part this strengthening process.

In some countries, a practical solution to improving the drug supply to rural health units has been to prepare and pre-pack sealed ration kits with items carefully calculated to match the regular needs of receiving centre. The Action Programme advises on the selection of the most nee drugs, and assists in making an estimate the quantities likely to be needed. The m aim of this system is to provide as preci as possible accurate quantities of appropriate drugs, thus avoiding both shortage and waste. A second objective i to promote more rational prescribing through an "obligatory" selection and quantity of essential drugs.

Kenya uses prepacked drug ration kits to avoid wastage and loss.

Photo: WHO/M. Grant

Photo: WHO

Getting drugs to remote health centres often involves travel over difficult terrain.

Emergency health kits

Drug kits have another quite separate role to play. The United Nations and relief agencies are increasingly called upon to respond to large-scale emergencies and disasters which may occur anywhere in the world, and which may pose a serious threat to public health. Much of the assistance provided in such situations by donor agencies, governments, voluntary organizations and others is in the form of drugs and medical supplies. However, the practical impact of this aid is often diminished because supplies do not reflect the real needs or because these needs have not been adequately assessed.

In order to facilitate a swift and effective response with supplies to meet priority health needs in the event of disasters, WHO together with other aid agencies, developed standard lists of essential drugs and medical supplies for use in an emergency. After substantial field testing, and in collaboration with a wide range of international partners, the kit was revised and is now permanently stocked by a number of non-profit pharmaceutical suppliers. The Action Programme publication "The New Emergency Health Kit" describes the kit's contents and development.

The kit has been adopted by many organizations and national authorities as a reliable, appropriate and quickly available source of the essential drugs and equipment needed in a disaster situation.

Education and training

An efficient drug sector depends on the reliability of all its areas. Lack of trained personnel – whether in procurement, distribution, quality control or prescribing – can break the interdependence and weaken the supply and quality of drugs. While external technical assistance can solve some of the short-term problems, over the long-term the Action Programme collaborates with member states to strengthen the capacities of national personnel.

Whenever possible training seminars and workshops take place within the context of national programmes. Training should not be *ad hoc*, but rather part of a coordinated national plan to build knowledge and skills. Training that takes place out of such a context can go underused when people have no forum or no equipment to apply their newly acquired knowledge.

For this reason the Action Programme focuses on core training, especially in the areas of drug management and rational use, as an integral part of national programmes. When support is given to regional or global seminars and workshops this is typically done because the subject requires a broader approach if meaningful discussions are to take place. For example, regional or global workshops provide an effective forum for long-term planning, and they can promote creativity in addressing national problems and help countries to avoid common problems by promoting the exchange of experiences. Every year the Programme supports national and regional seminars a which hundreds of health staff from countries throughout the world receive training of direct practical relevance.

The Action Programme strongly advocates the inclusion of the essential drugs concep in schools of medicine, pharmacy and public health, and in paramedical training institutions. It assists countries to develop and introduce relevant materials and curriculae for health personnel training.

Workshop on estimating drug requirements in Myanmar: training should always be part of a coordinated national plan to build knowledge and skills.

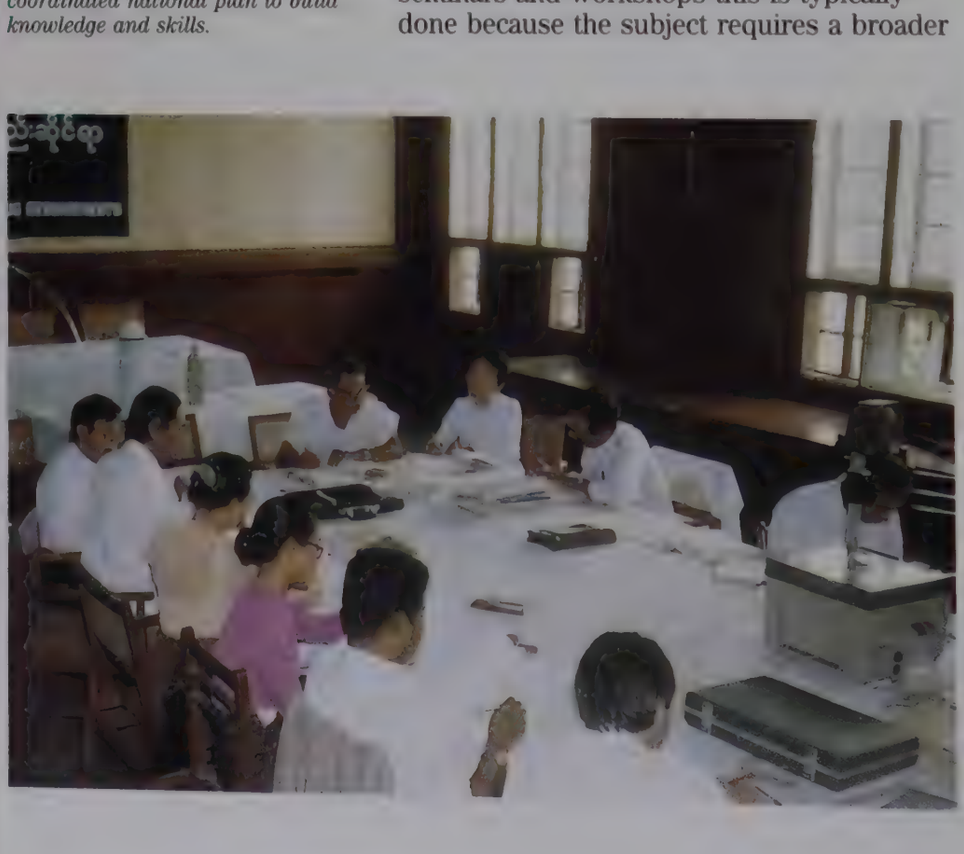


Photo: WHO/H. Hogerzeil

A Model Guide to Good Prescribing

In traditional medical schools, students are taught quite a lot of theoretical pharmacology but much less about practical therapeutics. As a consequen skills in choosing and prescribing drugs rationally remain undeveloped.

If students are not well taught as undergraduates how to choose and prescribe (essential) drugs rationally, they have no alternative but to copy th prescribing behaviour of their more "experienced colleagues after they graduate; in many cases this will include irrational behaviour. They will also b susceptible to influences which cause irrational prescribing if they have not been taught how to recognise and cope with such phenomena. Changing deeply rooted (prescribing) habits is generally known to be very difficult. That is why we need to act before poor prescribing habits ge chance to develop.

The Action Programme's "Model Guide to Good Prescribing" is a step in that direction. It is based on an innovative training programme in rational drug prescribing developed at the University of Groningen, Netherlands. The guide is intended to help students learn to think as they will have to practice, by describing how to analyse and use t information available when solving a patient's problem with drugs. The whole process from the patient complaint to monitoring the results of the treatment is described step by step. The "how" a "why" of each step is clarified, illustrated by examples which also include situations when no drug therapy is required. The guide also explains how to develop a "personal" drug list, selected according to rational principles.

The Model Guide is at present being field tested eight medical schools in developed and develop countries.

USING DRUGS RATIONALLY

All countries should include public education in their strategies to promote rational drug use

Flipchart from Bangladesh.

Consumer organization poster, Bolivia.

Patient leaflet, USA.

Ministry of Health poster, Kenya.

The procurement or production and distribution of drugs require resources, knowledge and skills but are fairly mechanical processes that do not call for changes in behaviour. This is not so for the use of drugs, which is a much more complex issue: no country, even the most developed, has totally succeeded in improving the prescribing patterns of medical personnel or the use of drugs by the public.

Despite their high price and their scarcity in many countries, drugs are often over-prescribed by health professionals and over-consumed by the public. The indiscriminate use of drugs not only wastes scarce resources that could otherwise be spent on nutritious food or on developing essential services, but it can also lead to drug-induced diseases.

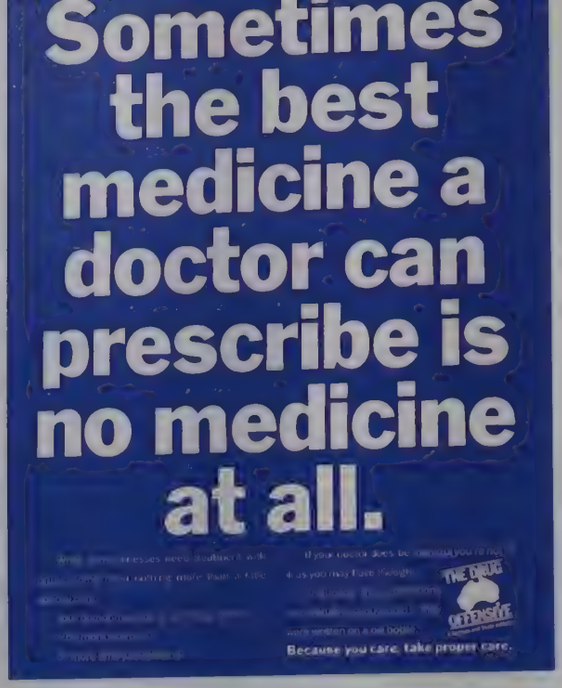
Many obstacles exist to the rational use of drugs. These include:

- lack of objective information and of continuing education and training in pharmacology;
- the methods of promotion employed by the pharmaceutical industry;
- the shortage of well organized drug regulatory authorities;
- the presence of large numbers of drugs on the market;
- the prevalent belief that "every ill has a pill";
- the attitudes of members of the medical profession, who are only too often reluctant to change their practices and view any restriction as a threat to their freedom to prescribe.

A new "culture" has developed around pharmaceuticals. Patients have come to have complete (and possibly unjustified) faith in a given drug, or in a "cocktail" of drugs; and all too many doctors are ready to satisfy the patients' expectations by prescribing antibiotics for a common cold, anti-diarrhoeals instead of oral rehydration salts, and tonics of dubious value to "build strength". Some countries suffer from "injection mania" – where the general public believe fervently in the curative properties of an injection, whatever the illness.

But vitamins, tonics and hormones cannot replace a balanced diet, any more than antibiotics can replace safe water and hygiene in the control of diarrhoeal diseases. Moreover, many medical conditions are self-limiting and may not require drug treatment at all.

Irrational use may be linked to problems of supply. When the only drugs that are available are unsuitable to treat a particular illness, social and economic pressures may cause health workers and pharmacists to prescribe them anyway. Similarly, unsuitable drug financing schemes can lead



Poster from Australia's drug offensive campaign.

Local village shop selling dangerous drugs in Thail

to over-prescribing (especially of the most expensive drugs) and to patients receiving insufficient treatment when they cannot afford to buy all the drugs prescribed.

Poor communication between health professionals and patients also contributes to irrational use. In developing and developed countries alike patients express dissatisfaction with the therapeutic encounter. They describe unsympathetic or paternalistic attitudes, hurried and superficial consultations, and lack of dialogue. It is unrealistic in such circumstances to expect that drug therapy will be properly prescribed or followed.

The Action Programme's research points to the importance of information and training in addressing the problem. Providers' attitudes drive the consumption patterns of consumers, but the opposite is true as well: the attitudes of consumers affect the prescribing patterns of health care providers. Patients may not follow a treatment regime because of lack of knowledge about the effects of medicine, dissatisfaction with the health care service, or simple inability to pay for the full prescription. Hence it is critically important to increase the knowledge of both providers and consumers, improve their interaction, and encourage more discriminating attitudes.

Controlling the marketing, presentation ar types of medicines can also play a role in preventing irrational use, for example by limiting the availability of unnecessary combination products. However, ultimatel effective promotion of rational use and changing deeply engrained practices requires understanding – and countering many diverse social, cultural and econom pressures.

Public education in Malawi

With the support of the Action Programme, Mala has embarked on a major pharmaceutical information, education and communications strategy during the first five years of this decade. The campaign will target the general public, clini and hospital patients, schoolchildren, prescribers and dispensers, and participants in adult literacy classes.

One medium chosen to convey drug use messag is traditional theatre which is still a lively feature of Malawi life and culture in a country where the population is predominantly rural. The mass media, such as newspapers, magazines and radio will also be intensively used in the campaign. Posters and morning health educational talks at rural health centres will be another channel of communication. And one particular innovation is teaching module on the proper use of medicine which is being built into the new science syllabu for primary schools, for children aged 12 to 13.

The aim of the campaign is to increase the community's knowledge and awareness of the proper use of medicines, to correct any misperceptions about the effectiveness of differe dosage forms and therapies, such as injections, to improve the interaction between patient and prescriber.

Access to information

Medicines cannot be used rationally unless everyone involved in the pharmaceutical supply chain has access to objective information about the drugs they use and buy. Governments need information about international market prices and reliable sources of supply; health professionals need a good understanding of the therapeutic action, the possible hazards and the cost of the medicines they prescribe; the public needs to know the do's and don'ts of self-medication and the general principles of medicine use and storage.

For the list of selected essential drugs to be meaningful and useful to prescribers and to health personnel at all levels who may use them, WHO considers that a national formulary or therapeutic guide is desirable. This is a compilation of pharmaceutical products approved for use in a given health care system, together with all the information about each substance that prescribers must have at their fingertips.

In some countries individual guides have been prepared for each prescribing level. So a simple illustrated book might deal with the 15 or so drugs handled by the village health worker, while a more complex guide will describe therapy with the 30-40 drugs at a community health centre.

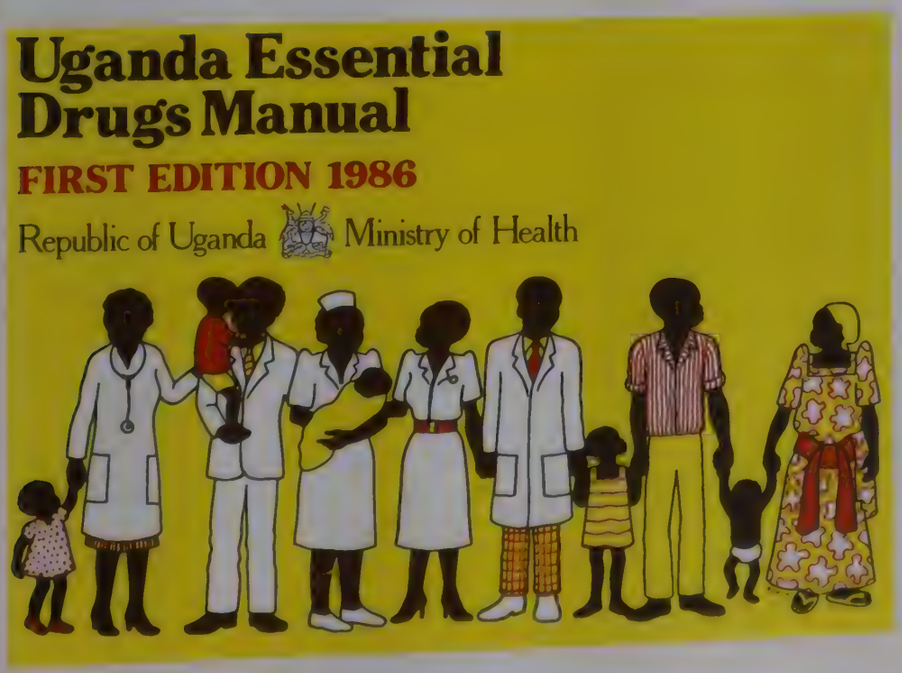
Sudan

Since the early 1980s, the Action Programme has assisted the Sudanese government in developing a national drug policy, an essential drug list per level of care, drug registration procedures, drug quality control and drug information services.

In addition, Sudan now has its own training manual, entitled Rational Use of Essential Drugs, which was produced by the Nile Province Essential Drugs Project. Aimed at both medical and paramedical staff, the book provides prescribing information for all frequent diagnoses and complaints in the country. It also includes the national list of essential drugs per level of health care, and information on drug prices. A shorter version of the guidelines was developed in Arabic for community health workers.

The training manual provided the basis for the 1991 Sudan National Formulary, distributed to every prescribing doctor in the country.

A national formulary contains prescribing information for every drug – recommended adult and child dosages, duration of therapy, contra-indications, precautions, adverse effects and advice to patients. It serves as a tool to guide and advise those who prescribe medicines and also as an administrative mechanism for creating and maintaining a list of key drugs for a given health care programme. The Action Programme has worked closely with many countries in the development of their national formularies and treatment guides.



International information sources

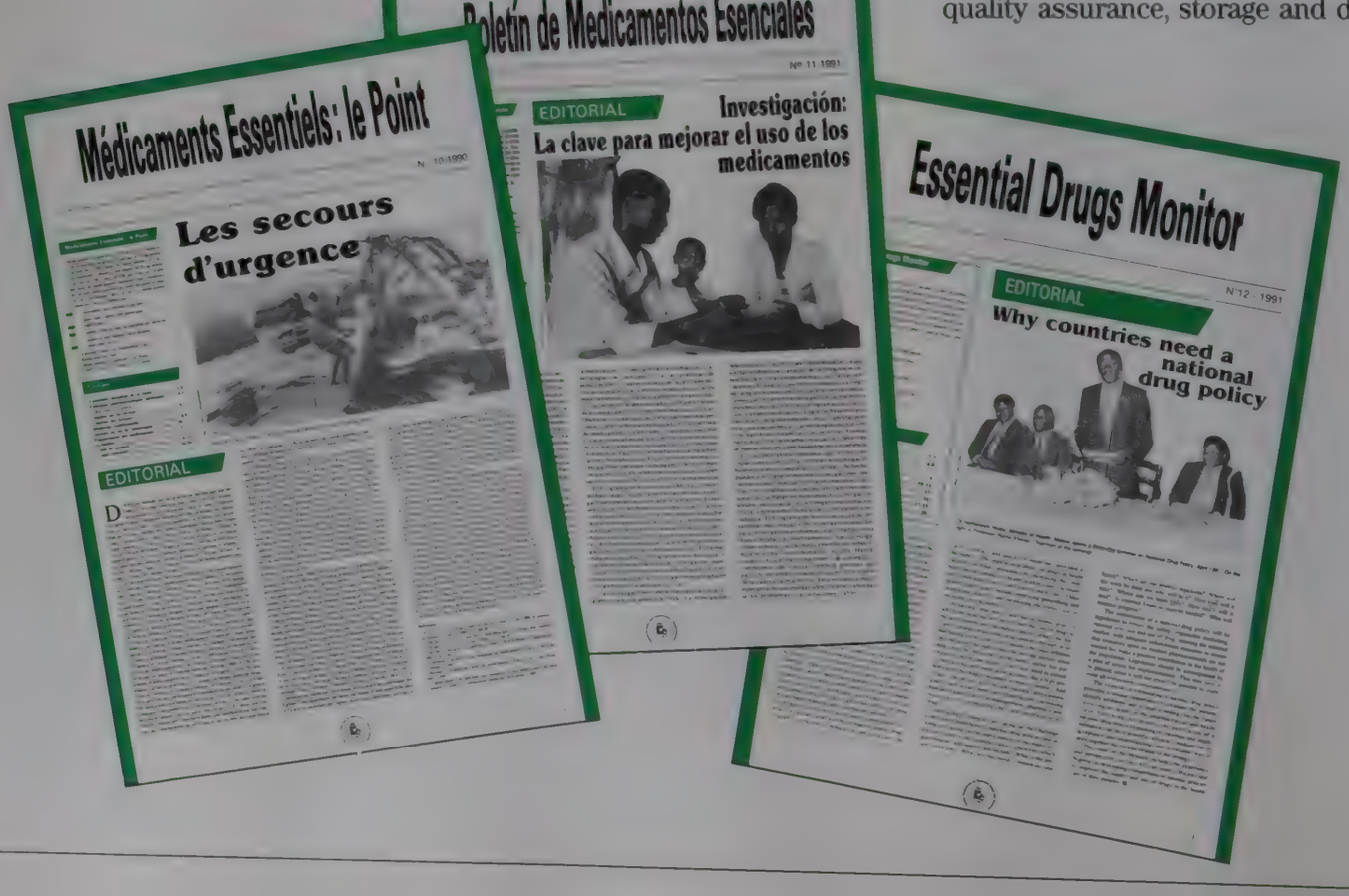
The Action Programme's Essential Drugs Monitor carries news of developments in national drug policies, current pharmaceutical issues and concerns, information and education, and operational research. The journal, which is free of charge and published in English, French and Spanish, is distributed widely to both developed and developing countries. It has a readership of some 200,000.

The Action Programme's Documentation Centre and bibliographic service responds to the needs of many people around the world who might otherwise have no access to the information they need. It acts as a unique source of reference used by a wide variety of organizations, policy makers, researchers and field staff. A regularly updated bibliography of core essential drugs publications is available both in printed form and on computer diskette. The Centre distributes over 20,000 documents and publications a year – an equivalent of 80 documents each working day – the large majority to developing countries.

WHO also facilitates the international exchange of information in other importan areas. The WHO Certification Scheme for the Quality of Drugs moving in Internation Commerce provides a channel of communication between drug regulatory agencies in importing and exporting countries. Other regular sources of pharmaceutical information include the *Pharmaceutical Newsletter* (sent to designated "WHO information officers" in each ministry of health), which lists the regulatory decisions in WHO member stat and the quarterly subscription journal *WH Drug Information* which, in addition to regulatory topics, also discusses general issues and new drug developments.

A key to effective exchange of information on drugs is the availability of a unique an universally available generic name. Some 5,900 generic names are included in the WHO Cumulative List of International Non proprietary Names, and new lists are regularly published in *WHO Drug Information.*

In addition, WHO produces a wide range publications and technical guidelines on pharmaceutical issues ranging from broad analyses, such as the *World Drug Situati* to detailed guidelines covering such technical aspects as drug prescribing, quality assurance, storage and distributio



THE ACTION PROGRAMME AND RESEARCH

The Action Programme does not itself engage in the research and development of new or improved drugs or vaccines; its concern is with the availability and use of existing essential drugs.

Instead the Programme undertakes and encourages operational research aimed at filling some of the many gaps in existing knowledge about the best means of selecting, procuring, and distributing drugs, and their use by prescribers and consumers. For instance, very little is still known about how providers make decisions on which drugs to prescribe, or how and why patients use – or fail to use – medicines. We need to know how training or intervention strategies actually affect prescribing practice; whether the methods of procuring drugs are the best possible for a given country or the most appropriate for national health services; and whether there are better ways of promoting effective drug use efficiently and cost-effectively?

In general, four different types of approach are taken:

- **evaluation and monitoring,** involving gathering information about successful essential drugs programmes and policies and monitoring their progress;
- **problem solving,** that is, determining the constraints at each level of the drug supply system that tend to prevent sound policies being carried out;
- **new intervention testing,** which involves appraising new and improved methods or approaches in essential drug policies;
- **simplifying research methods,** so as to make it easier to investigate problems related to the availability and use of drugs.

Research that leads to breakthroughs in pharmaceutical technology or in highly sophisticated and expensive techniques of biomedical practice may superficially appear to be more "glamorous". But the operational research that WHO's Action Programme on Essential Drugs undertakes has a direct bearing on the ways in which vital medicines can be made available and accessible to the greatest number of people.

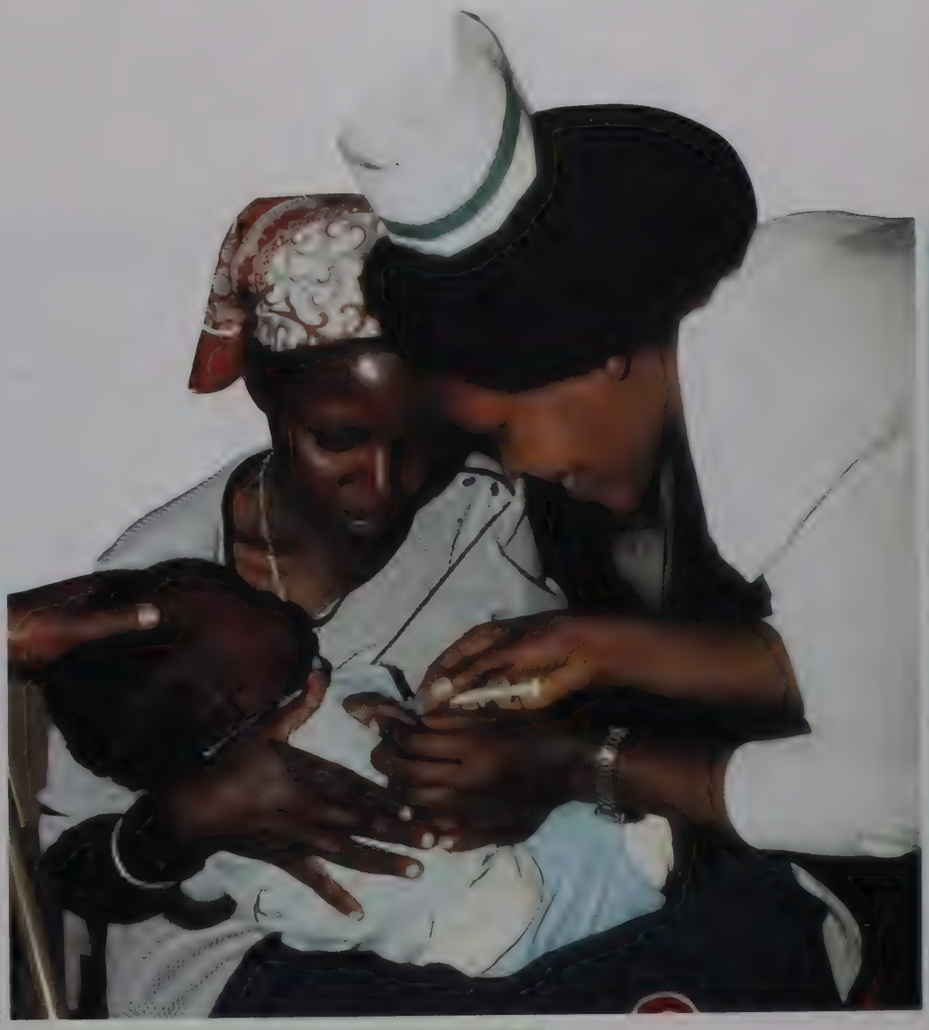


Photo: M. Grant

Injection research in Asia

The belief that injections are a powerful way of restoring or maintaining health is shared by health care providers and lay people alike in many different cultures. The problem of injection misuse is so complex that it cannot be solved by traning of health personnel alone since informal injection providers will administer injections to clients in their homes, market places, etc.

A study in Indonesia, where over-use of injections is widespread, found that in government health centres nearly 50% of infants and children, and 75% of all patients aged five and over received one or more injections. The highest use of injections was for skin disorders, musculo-skeletal problems, and nutritional and vitamin deficiencies – conditions which do not generally require such treatment.

When patients in the Philippines were asked what they thought of when hearing the word "injection," the replies included *mabilis* (fast), *malakas* (strong), and *mabisa* (effective).

The Action Programme, in collaboration with national researchers and the University of Amsterdam, is undertaking studies in Senegal, Uganda and Indonesia to determine the extent to which injections are misused, to gain insight into why injections are so popular, and to develop a simple and rapid survey methodology for future assessments of the extent of inappropriate injection use.

GLOBAL PARTNERS

Since WHO's Action Programme was set up in 1981, it has gained many different partners. Ministries of health and drug regulatory agencies in both developing and developed countries work closely with WHO in its efforts to improve the supply and use of essential drugs.

The Action Programme receives substantial direct support from a number of donors, including Australia, Denmark, Finland, France, Japan, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom and the United States of America. Such donated funds have been crucial to the Programme's growth and range of activities and have also contributed to international confidence in the essential drugs concept as a realistic strategy to improve accessibility to pharmaceuticals and their rational use. The continuation of this financial and moral support remains vital.

Many international and non-governmental organizations throughout the world have adopted the essential drugs policy and strategy in their development work. The League of Red Cross and Red Crescent Societies, the United Nations High Commission for Refugees, and Médecins sans Frontières, among others, have developed an essential drugs list for use in their operational relief work.

The World Bank also provides increased funds for health programmes with an essential drugs component. The United Nations Industrial Development Organization (UNIDO) actively supports th transfer of pharmaceutical technology to developing countries, and provides suppor for setting up local drug factories. UNICEF also collaborates closely with WHO, especially through its drug procurement a packing centre in Denmark and in the development of community participatory cost sharing schemes.

Consumer organizations too have widely endorsed the concept of essential drugs a strongly support the Action Programme. Their role in the education of the general public is important. Consumer groups in many parts of the world are actively reaching out to young and old through the mass media and other channels to promo community empowerment and awareness the wise use of medicines.

The pharmaceutical industry, has a significant partnership role to play. Nation and international companies are the producers of essential drugs. Within industry are also to be found the development and research skills needed t discover and make affordable new drugs tackle particularly the health problems of developing countries.

Finally, international networks such as th Drug Utilization Research Groups of Afric and Europe, and the International Netwo for the Rational Use of Drugs, are playing increasingly active role and are collaborating with WHO to promote the objectives of the Action Programme.

Essential drugs starting their long journey from UNICEF's drug storage depot in Copenhagen.

Photo: WHO/E. Mandelmann

FUTURE OUTLOOK

Hospital pharmacy, Djibouti.

Photo: WHO/M. Senti

The essential drugs concept was born from need and a concern for social justice in health. During more than a decade the preparation of a model list of essential drugs has developed into the Action Programme's systematic work on the complex range of issues that every country must address if its citizens are to have access to drugs of good quality that are correctly prescribed and used.

The principle of an essential drugs list has been accepted by countries throughout the world. 113 member states have drawn up their own lists of the products most relevant to their needs, 66 now operate essential drugs programmes and another 32 countries have such programmes under development. Over 60 countries have formulated national drug policies.

But approximately one half of the world's population still lacks regular access to the most needed essential drugs. And this disturbing estimate for the developing world reflects a drug situation where poorly coordinated policies and strategies, inefficient procurement, inadequate distribution, uneven assurance of quality and irrational drug use are more often the norm than the exception.

The Action Programme has made significant progress in addressing these problems, helped by the increasing political will throughout the world toward the adoption of the essential drugs concept and the implementation of national drug policies and essential drugs programmes. Increased global awareness of the problems resulting from irrational drug use is creating support for developing broad-based strategies to modify harmful practices and attitudes.

However, the world drug situation is inextricably linked to changes in the world health situation, and in turn, the world socio-economic situation. Many developing countries during the eighties experienced a significant economic decline. This was mirrored by a deterioration in the social infrastructure – and the public drug infrastructure has been especially hard hit.

If public drug supply systems weaken and collapse under social and financial pressures in the coming years, communities will be forced to create their own solutions to their health care needs. In most instances this will probably mean relying on the private sector and informal markets. But these alternative mechanisms cannot replace the role of the public sector.

Drugs are available at this Zambian health centre b the dispensary shelves are bare in many parts of th world. In the global economic crisis public drug sup is particularly threatened.

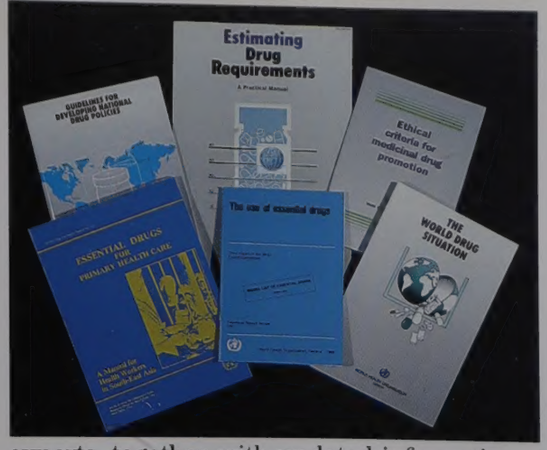
National mechanisms for quality assurance must be in place and public drug infrastructures simply must exist to ensure the equitable supply of good quality, affordable drugs to all people.

The public sector can also promote the more rational use of drugs far more effectively than ad hoc private initiatives can do, by using national formularies, conducting educational campaigns and via the systematic exchange of drug information through the use of the International Nonproprietary Names. Resisting the economic pressures to cut-back the quality and quantity of services from the drug sector will be a major challenge in the years ahead.

Although the concept of essential drugs is widely accepted, many countries have not yet translated political will into concrete policies and programmes supported by sufficient allocations of resources and authority. The Action Programme intends to continue its advocacy and technical supp so that this concept, and its economic an health advantages, are better recognised a used. If people everywhere are to have access to the medicines they need then a essential drugs policy is no longer an opt but a pressing need.

The long-term goal, well into the 21st century, is the acceptance by policy mak health workers and the public alike that a few drugs of good quality, used rationally for specific conditions, are more effective than huge numbers of drugs used indiscriminately.

FURTHER READING



WHO PUBLICATIONS

(obtainable from WHO sales agents in each country or Distribution and Sales, WHO headquarters, Geneva.)

The World Drug Situation, WHO, 1988
A comprehensive review of the many factors that influence the current availability and consumption of pharmaceuticals throughout the world.

Guidelines for Developing National Drug Policies, WHO, 1988
Addressed to policy-makers and administrators, this book identifies and explains the many complex factors to be considered when planning and carrying out a national drug policy.

The New Emergency Health Kit, WHO, 1991
Explains the historical development of the kit, details the contents, and provides assessment and treatment guidelines for diarrhoea and respiratory infections.

Estimating Drug Requirements, WHO, 1989
A practical manual for course work or self study which describes, using working examples, how to estimate drug needs based on previous consumption and/or morbidity patterns.

International Nonproprietary Names (INN) for Pharmaceutical Substances, WHO, 1988
The seventh cumulative list covering all currently proposed and recommended INN; a useful aid for drug manufacturers, prescribers and regulatory authorities who must work with generic names.

Ethical Criteria for Medicinal Drug Promotion, WHO, 1988
Presents ethical criteria for the promotion of medicinal drugs, and constitutes a frame of reference for judging proper behaviour in drug promotion.

The Use of Essential Drugs – Model List of Essential Drugs (Sixth List), Technical Report Series No. 796, WHO, 1990
Incorporates revisions to the Model List agreed upon by a WHO committee of experts, together with updated information on several other components of national drug policy.

WHO Model Prescribing Information: Drugs used in Anaesthesia, WHO, 1989; Drugs used in Parasitic Diseases, 1990 Drugs used in Mycobacterial Diseases, 1991
Provides advice on the safe and correct prescribing of essential drugs in these specific fields.

WHO Expert Committee on Specifications for Pharmaceutical Preparations, Technical Report Series No. 790, 1990
Deals with the quality assurance of pharmaceuticals and specifications for drug substances and dosage forms, as well as drug stability and sampling procedures, and the problems created by counterfeit preparations.

UNPUBLISHED REPORTS AND GUIDELINES

In addition to WHO's priced publications in the field of pharmaceuticals, many offset documents, technical reports and guidelines covering subjects ranging from drug financing to research methodologies, are also available free of charge directly from the Action Programme on Essential Drugs, WHO, Geneva.

PERIODICALS

Essential Drugs Monitor
Published about three times a year in English, French and Spanish, by the Action Programme on Essential Drugs. It is available free of charge and provides information on national drug policies, rational drug use, supply, research, training and the development of national essential drug programme activities.

WHO Drug Information
A quarterly subscription publication, which communicates pharmaceutical information either developed or issued by WHO, or transmitted to WHO by research and regulatory agencies.


ST
ESSENTIAL DRUGS
PROGRAMME
1000 tablets
ULFADIMIDINE BP
(Sulfadimidinum)
500 mg each
1000 capsules
ETRACYCLINE
ydrochloride
etracyclinum) (B.P.)
250mg each
PARACETAMOL BP
(PARACETAMOLUM)
500 mg each
SAPONATED BENZYL BENZOATE USNF
1 litre
1,000 tablets
Phenoxymethylpenicillin B.P.
250 mg each
(Phenoxymethylpenicillinum)
To be used only as directed.
Keep out of the reach of children.
ERGOMETRINE
AND OXYTOCIN
FERROUS SULPHATE BP
(FERRUM SULFURICUM)
200 mg each
CHLOROQUIN
40 mg/ml
(Chloroquinum)
10 ampoules of 5 ml
Epinephrine Injection
Essential Drugs Programme
ORAL
REHYDRATION SALTS
CHLORAMPHENICOL EYE OINTMENT (BPC)
1%

If you want more information...

You can contact the WHO Representative in your country, or any of the WHO Regional Offices listed below:

World Health Organization
Regional Office for Africa
P.O. Box 6
Brazzaville
Congo

World Health Organization
Regional Office for the Americas/
Pan American Sanitary Bureau
525, 23rd Street, N.W.
Washington D.C. 20037
USA

World Health Organization
Regional Office for the Eastern
Mediterranean
P.O. Box 1517
Alexandria 21511
Egypt

World Health Organization
Regional Office for Europe
8 Scherfigsvej
2100 Copenhagen 0
Denmark

World Health Organization
Regional Office for South-East Asia
World Health House
Indraprastha Estate, Mahatma Gandhi Road
New Delhi 110002
India

World Health Organization
Regional Office for the Western Pacific
P.O. Box 2932
Manila 1099
Philippines

Or you can write directly to:

The Action Programme
on Essential Drugs
World Health Organization
1211 Geneva 27
Switzerland
Telex 415 416, Fax 791 07 46

Please state in which areas or in what specific information you are interested.

Photo: WHO/C. Pétremand

Photo: WHO/P. Marchez

WHO's Action Programme on Essential Drugs was established in 1981 to assist Member States to ensure the regular supply, at the lowest possible cost, and the rational use of a selected number of safe and effective drugs and vaccines of acceptable quality.

This brochure reviews the development of the essential drugs concept, examines the different components of a national drug policy and reviews some of the problems currently faced by developing countries in the procurement, distribution and use of drugs. It examines the role of the Action Programme, particularly concerning its country and informational support, and assesses the future outlook for the world drug situation.

World Health Organization, Geneva